IT INVESTMENT MANAGEMENT - CONTROL (2.0) DEVELOPMENT / CONSTRUCTION STAGE (2.4)

| Number | Phase/Stage/Task | Process Description |
|--------|---|---|
| 2.4 | Development / Construction Stage | Entrance Criteria: The entrance criteria for the Development/Construction Stage is for the Project Manager to receive from the Project Sponsor a signed Critical Design Review Memorandum |
| | | Purpose: During the Development/Construction Stage, the Project Manager and the Integrated Project Team establish an environment necessary to code and test; create or modify programs defined by program specifications, conduct unit and integration testing. The Project Manager and team has continually involved the end user throughout this stage and has demonstrated to the stakeholders/users that the product meets the requirements. Near the end of this stage the Project Manager ensures that a Migration Turnover/Test Readiness Review is conduct for the purpose of demonstrating that the product is ready for user and system acceptance testing. |
| | | Exit Criteria: The exit criteria for the Development/Construction stage is a completed and signed Test Readiness Review Memorandum from the Project Sponsor to Project Manager. Copies are sent to the ADs IRM Advisor and the SCO. The SCO, on behalf of the Sponsor, will develop a draft Test Readiness Review Memorandum for the Project Sponsor. The Sponsor will finalize and sign the Test Readiness Review Memorandum and forward it to the Project Manager, with a courtesy copy sent to the ADs IRM Advisor and the SCO. |
| | | Decisions (Go/NoGo Points) : |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: |
| 2.4.1 | Project Manager and Integrated Project Team establish environment to begin developing/ | Purpose: This activity establishes the system environments and identifies and commits the facilities necessary for software acquisition and development and testing. This includes hardware, libraries, development tools, software migration facilities, etc. This is required before developers begin creating or modifying programs. It is extremely important that the identification and establishment of the development environment is included within the project plan. |
| | constructing the system | Deliverables: |

| Number | Phase/Stage/Task | Process Description |
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| | | Time Frames: |
| | | Who's Involved: |
| 2.4.2 | Development Team create programs to met the System Design Baseline | Purpose: The development team begins to create or modify the programs specified in the System Design Document Baseline and compile programs to obtain machine-executable modules. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Development Team / Integrated Project team. |
| 2.4.3 | Development Team develop program | Purpose: The development team begins to create program documentation, and compile programs to obtain machine-executable modules. |
| | documentation | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Development Team / Integrated Project team. |
| 2.4.4 | 4 Development Team conducts Unit Testing | Purpose: After the programs have been created and compiled, the programs undergo unit testing. The Development Team typically performs these tests. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Application Development Team / Integrated Project team. |
| 2.4.5 | Development Team conducts Integration Testing | Purpose: After the programs have been created and compiled, the programs undergo integration testing. The Application Development Team typically performs these tests. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Development Team / Integrated Project team. |

| Number | Phase/Stage/Task | Process Description |
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| 2.4.6 | Development Team conducts Security Testing as identified in Security Plan | Purpose: Security testing is performed according to the Security Test Plan, in order to ensure that the application meets its security requirements. Security Testing is used to identify design and implementation flaws that would allow a user to violate security requirements or accountability policies. Security testing is conducted by the SAT group or QAT in consultation with the AIS Security Lead. The Security Test results are recorded in the Security Test Report. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: |
| 2.4.7 | IT Security Specialist Certifies System | Purpose: The purpose of the Security Certification Package is to document the analysis and certify the system's technical and non-technical security features and safeguards. In addition the Package contains an analysis of the extent to which the system meets the security requirements for its mission and operational environment. It is the Information Systems Security Officer's responsibility to certify that the application has been tested and found to meet all applicable federal policies, regulations, and standards for securing information systems and the data that will be processed by them. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: |
| 2.4.8 | Project Manager and Integrated Project Team prepare Computer Systems Operator's Manual (CSOM) | Purpose: The Project Manager and the Project Team prepare a Computer Systems Operator's Manual (CSOM). This manual provides the information needed to execute batch applications; job dependencies, restart/rerun instructions, report distribution information; and special handling instructions, required scripts, input parameters, and error handling procedures. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Application Development Team / Integrated Project team and Project Manager. |

| Phase/Stage/Task | Process Description |
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| Project Manager submits CSOM to site responsible for Operations and Maintenance | Purpose: The CSOM is reviewed by the O&M site representative. The O&M site representative reviews for completeness. |
| | Deliverables: Computer System Operations Manual (CSOM) |
| | Time Frames: |
| | Who's Involved: O&M site representative. |
| O&M Site Representative accepts CSOM | Purpose: The CSOM is reviewed by the O&M site representative. The O&M site representative can either accept it written or require that the CSOM include recommendations thereby requiring a revision to the CSOM. |
| | Deliverables: |
| | Time Frames: |
| | Who's Involved: O&M site representative. |
| Project Manager and Integrated Project Team update Project Plan | Purpose: Before entering Test Readiness Review, the project plan must be evaluated and if necessary, revised where appropriate. |
| | Deliverables: |
| | Time Frames: |
| | Who's Involved: Project Manager and Integrated Project Team. |
| Project Manager determines if project is ready for | Purpose: Based on the status of the project, the risk of proceeding or not proceeding, the project manager makes a determination if the project is ready for the formal Test Readiness Review. |
| the Test Readiness | Deliverables: |
| Keview | Time Frames: |
| | Who's Involved: Project Manager |
| | Project Manager submits CSOM to site responsible for Operations and Maintenance O&M Site Representative accepts CSOM Project Manager and Integrated Project Team update Project Plan Project Manager determines if project is ready for |

| Number | Phase/Stage/Task | Process Description |
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| 2.4.13 | Test Readiness Review Team conducts Test Readiness Review | Purpose: The Test Readiness Review is a major milestone where a go/no-go decision point will ensure that the Project Team, users, and the Independent Testing staff jointly approve the turnover of the system code, documentation, and associated verification plans for acceptance testing and production. This is done after the developers have demonstrated to the stakeholders/end users that the baseline system is complete, and functions correctly. |
| | | Deliverables: <i>Test Readiness Review Report</i> ; an Engineering Release Record; and a Turnover Package. |
| | | Time Frames: |
| | | Who's Involved: Project Analysts/Designers/Developers; Business Sponsor/User Representatives; Project Quality Assurance (QA) Team members; System Acceptance Test (SAT) Team members; Configuration Management (CM) Team representatives; Data Administration Team (DAT) representatives; AIS Security Team representatives; Customer representatives |
| 2.4.14 | Test Readiness Review Team prepares finding and | Purpose: |
| | | Deliverables: |
| | | Time Frames: |
| | recommendations | Who's Involved: |
| 2.4.14.1 | Action Items from the TRR are tracked and | Purpose: Any action items that the TRR recommends are tracked by the Project Manager and reported to the SCO. Part of the SCO's responsibility during the control phase is IT Project Oversight. |
| | reported to the SCO | Deliverables: |
| | SCO | Time Frames: |
| | | Who's Involved: Project Manager and the SCO Point of Contact and System User Representative. |
| 2.4.15 | Project Manager determines if the Project is ready to | Purpose: |
| | | Deliverables: |
| | the next | Time Frames: |
| | Stage | Who's Involved: Project Manager |

| Number | Phase/Stage/Task | Process Description |
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| 2.4.16 | Project Sponsor reviews Project Managers recommendations | Purpose: The Project Sponsor reviews the findings and recommendations to determine if he/she should accept the recommendations and approve the project to proceed. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Project Sponsor |
| 2.4.17 | Project Sponsor accepts recommendations, approves project to proceed | Purpose: The Project Sponsor makes a decision to either: Approval - the Turnover Package is satisfactory and the project may proceed. Limited Approval - action items are assigned that require closure before the project proceeds. Returned - the Development Baseline is deficient, and the project must be re-approved after negotiation with the Project Sponsor/System Owner, and/or the ITIB, as appropriate. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: |
| 2.4.18 | Project Manager prepares Test Readiness Review Memorandum | Purpose: Based on the Project Sponsor's approval of the TRR findings and recommendations, the Project Manager prepares a draft Test Readiness Review Memorandum for the Sponsor's signature. The project may not proceed to the next stage without the TRR Memorandum so it is in the Project Manager's best interest to see that the Project Sponsor's documents their concurrence with the findings and recommendations of the TRR. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Project Manager and Sponsor |
| 2.4.19 | Project Manager sends <i>Test</i> <i>Readiness Review</i> <i>Memorandum</i> to Project Sponsor | Purpose: Now that the draft TRR Memorandum has been prepared it is transmitted to the Project Sponsor for review and signature. |
| | | Deliverables: |
| | | Time Frames: |

| Number | Phase/Stage/Task | Process Description |
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| | | Who's Involved: |
| 2.4.20 | Project Sponsor reviews TRR Memorandum | Purpose: Once received, the Project Sponsor reviews the TRR memorandum. The Project Sponsor may change the wording but can not change the findings and recommendations from the TRR. |
| | | Deliverables: |
| | | Time Frames: |
| | | Who's Involved: Project Sponsor |
| 2.4.21 | Project Sponsor signs and sends | Purpose: The Project Sponsor signs and returns the TRR Memorandum to the Project Manager for documentation to the Project file. |
| | final Test Readiness Review | Deliverables: A signed Test Readiness Review Memorandum |
| | Memorandum back to | Time Frames: |
| | Project Manager | Who's Involved: Project Sponsor and Project Manager |